Table FS-5 Preliminary Soil Movement Plan Mandalay Bay 002-10261-00-003

Preliminary Sludge and Cap/Fill Soil Excavation and Movement Plan

						From Sampling		To Sampling Regimen	
Soil Movement #	Material	From Area	To Area	Comments	1000 cubic yards	From Sampling Regimen	From Sampling Purpose	To Sampling Regimen	To Sampling Purpose
1	Clean Soil	1	2	clean soil stockpile, prepares So. SCA	315	no sampling needed	none	10 TPH random- PID every load	Confirm Clean soil
2	Haz. PCB Sludge	3	Off-site Disposal	removes all hazardous materials from Site	5	PCB field screen confirm w/ 8082	TSCA compliance, control off- site disposal- confirmation sampling- extent	Landfill decision	To Kettleman Land Fill
3	Cap/Fill	4	1	places inert cap/fill material in bottom of SCA	50	no sampling needed	none	random TPH and PCB sampling every 10,000 cubic yards, PID every load	confirm trace TPH and PCB
4	Cap/Fill	5	1	places inert cap/fill material in bottom of SCA	28	no sampling needed	none	random TPH and PCB sampling every 10,000 cubic yards, PID every load	confirm trace TPH and PCB
5	Sludge	4	1	places sludge material within SCA for biological/SVE treatment	50	visual, 1 TPH/Acre, 4 composite acres for PCB, Metals, PID every load	Confirmation Sampling	Submit SVE influent sample for VOC analyses	Evaluate mass extracted
6	Sludge	5	1	places sludge material within SCA for biological/SVE treatment	37	visual, 1 TPH/Acre, 4 composite acres for PCB, Metals, PID every load	Confirmation Sampling	Submit SVE influent sample for VOC analyses	Evaluate mass extracted
7	VOC Soil	8	1	source VOC soil to be treated and then placed and Trace VOC soil to be placed- Area 4 clean- So. SCA clean capped	150	PID field screen (50' centers), Mobile lab for 8021B screening with confirmation analysis by 8260B. More sampling @ >1 ppm total VOCs.	Differentiate Source vs. Trace Soils and Document Levels, extent	PID on SVE Treated Soil (confirmation cap sampling upon completion - see Section 8.4.1)	Confirm Treatment Completed
8	Clean Soil	4	4	fill Area 8 and 90% compacted per geotechnical requirement	500	no sampling needed	none	Geotech Compaction, no env. Sampling	Confirm Geotech. Requirements
9	Clean soil	5	4	prepare So. SCA for receiving affected materials- stockpile or place clean soil in 4	285	no sampling needed	none	Geotech Compaction as needed, no env. Sampling	Confirm Geotech. Requirements
10	Cap/Fill	6	5	places inert cap/fill material in bottom of SCA	70	no sampling needed	none	random TPH and PCB sampling every 10,000 cubic yards, PID every load	confirm trace TPH and PCB
11	Sludge	6	5	places sludge material within SCA for biological/SVE treatment	139	visual, 1 TPH/Acre, 4 composite acres for PCB, Metals, PID every load	Confirmation Sampling	Submit SVE influent sample for VOC analyses	Evaluate mass extracted
12	Clean Soil	1	5	balances cap material across no. SCA	70	no sampling needed	none	no interim sampling needed (confirmation cap sampilng upon completion - see Section 8.4.1)	none
13	Clean Soil	6	6	material used for residential engineered fill	900	no sampling needed	none	Geotech Compaction	Confirm Geotech. Requirements
14	Stockpiled Clean Soil and Clean soil	2	6	prepare No. SCA for receiving affected materials- stockpile or compact clean soil in 6 as appropriate	290	no sampling needed	none	Geotech Compaction	Confirm Geotech. Requirements
15	Cap/Fill	7	2	places inert cap/fill material in bottom of SCA	15	no sampling needed	none	random TPH and PCB sampling every 10,000 cubic yards, PID every load	confirm trace TPH and PCB
16	Sludge	7	2	places sludge material within SCA for biological/SVE treatment	35	visual, 1 TPH/Acre, 4 composite acres for PCB, Metals, PID every load	Confirmation Sampling	Submit SVE influent sample for VOC analyses	Evaluate mass extracted
17	Clean Soil	7	2	Cap North SCA	20	no sampling needed	none	PID every load (confirmation cap sampling upon completion -see Section 8.4.1)	Confirm Clean soil
18	Clean Soil	4, 6, 7, & 2	4, 6, 7, & 2	balance clean soil into residential pads- engineered fill	500	no sampling needed	none	acre grid pattern- 90 acres @ 0.5' & 3' TPH, PAH, PCB, metals. Additional 10' sample every 5-acres. Dioxin sampling every 5-acres. Soil vapor survey (8260B), 1 per acre at depth of 5'. One methane sample every 4 acres.	Confirm Clean soil
				TOTAL	3459				
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^{*} Pre-soil movement characterization detailed in Section 8.4.1 of the FS/RAP.